

REMARKS

The Office Action of September 12, 2005 has been received and reviewed. Claims 1-53 are currently pending in the application. New claims 49-53 have been added herein. Claims 1-29 and 32-43 are withdrawn from consideration as being directed to a non-elected invention. Claims 30, 31, and 44-48 stand rejected. Claims 30, 44, and 46 have been amended as set forth herein. Claims 31, 45, 47, and 48 have been cancelled herein. All amendments and cancellations are made without prejudice or disclaimer. Reconsideration is respectfully requested.

Priority Document

At the request of the Examiner, a certified copy of the application filed in the European Patent Office on March 16, 2001 is submitted herewith.

Support for new claims 49-53:

Support for new claims 49-53 can be found throughout the specification and claims.

More specifically, support for new claims 49 can be found in original claims 30-32 and in the specification at ¶¶ 13, 24, 25, and 51 as well as in FIG. 6.

More specifically, support for claim 50 can be found in original claims 30-32 and in the specification at ¶¶ 17, 24, 25, and 51 as well as in FIG. 6.

More specifically, support for claim 51 can be found in original claims 30 and 31 and in the specification at ¶¶ 13, 25-27, and 70.

More specifically, support for claim 52 can be found in original claims 30 and 31 and in the specification at ¶¶ 13, 19, 20, 25-27, and 70 as well as in FIG. 6.

More specifically, support for claim 53 can be found in original claims 30 and 31 and in the specification at ¶¶ 13, 17, 25-27, and 70 as well as in FIG. 6.

Applicants respectfully submit that no new matter has been added.

Specification

Applicants have amended the claim to priority in ¶ 1 of the specification to correct a typographical error. Specifically, the PCT International Application No. "PCT/EP/02/043033" has been amended to correctly read "PCT/EP02/03033."

Rejections Under 35 U.S.C. § 112, First Paragraph.

Claim 30 stands rejected under 35 U.S.C. § 112, first paragraph as allegedly failing to comply with both the written description and enablement requirements. Applicants respectfully submit that the amendments to claim 30 overcome the rejections and request withdrawal of same.

Although the applicant does not agree that claim 30 lacks supporting written description or required enablement, to expedite prosecution, SEQ ID NOs: 1, 2, 3, 4, 6, 7, and 10 have been included in claim 30 as specific compounds. This amendment has support in original claim 31 as some of the elements of original dependent claim 31 are what has been added to claim 30. With the inclusion of the above noted SEQ ID NOs, applicants respectfully submit that claim 30, as amended, no longer claims the broad genus of compounds which the Examiner asserted lacked written description in the specification. See Office Action at page 4.

In addition, with the inclusion of the above noted SEQ ID NOs, applicants respectfully submit that undue experimentation is not required to identify the recited SEQ ID NOs. As such, appellants respectfully submit that the amendments to claim 30 overcome the rejection under 35 U.S.C. § 112, first paragraph, for lack of enablement.

For the foregoing reasons, applicants respectfully submit that the amendments to claim 30 overcome the rejections under 35 U.S.C. § 112, first paragraph, for lack of adequate written description and enablement. Consequently, reconsideration and withdrawal of the rejections concerning claim 30 are respectfully requested.

Rejections Under 35 U.S.C. § 102(b)

Claims 31 and 44-48 stand rejected under 35 U.S.C. § 102(b) as assertedly being anticipated by U.S. Patent 5,604,131 to Wadsworth *et al.* (hereinafter "Wadsworth"). Specifically it was thought that Wadsworth discloses the protein sequences presented in SEQ ID NOs: 5, 7, 8, 12, and 13. Claims 31, 45, 47, and 48 have been cancelled herein rendering the

rejections thereof moot. Applicants respectfully submit that, as to SEQ ID NOS: 5, 8, and 13 (amended claim 46), the claim amendments overcome the rejections and request the withdrawal of the same. As to SEQ ID NOS: 7 and 12 (amended claim 44), applicants respectfully traverse the rejections for the reasons set forth herein.

SEQ ID NOS: 7 and 12 (Claim 44)

Applicants note that claim 44 has been amended herein to claim, in an independent format, a composition selected from the group consisting of SEQ ID NOS: 7 and 12. The Examiner, at page 8 of the Office Action, asserts that Wadsworth discloses a polypeptide that is 100% identical to SEQ ID NOS: 7 and 12. Applicants respectfully assert that Wadsworth does not teach the recited compounds.

A claim is anticipated only if each and every element as set forth in the claims is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

As noted by the Examiner in sequence alignments B and C of the Office Action, Wadsworth discloses the first 15 and 18 amino acids of SEQ ID Nos: 12 and 7 respectively. However, Wadsworth does not disclose the last 15 and 16 amino acids of SEQ ID NOS: 12 and 7 respectively. As Wadsworth discloses little more than half of an individual sequence claimed, it cannot be said to teach each and every element of the claimed compositions. Consequently, as directed by the Federal Circuit in *Verdegaal Bros.*, the disclosure of Wadsworth cannot anticipate SEQ ID NOS: 7 and 12.

Reconsideration and withdrawal of the rejection of claim 44 are respectfully requested.

SEQ ID NOS: 5, 8, and 13 (Claim 46)

Applicants note that claim 46 has been amended herein to claim, in an independent format, a composition consisting essentially of a composition selected from the group consisting of SEQ ID NOS: 5, 8, and 13. The Examiner, at page 8 asserts that Wadsworth discloses a polypeptide that is 100% identical to SEQ ID NOS: 5, 8, and 13. Applicants respectfully submit that Wadsworth does not teach polypeptides consisting essentially of the recited compounds.

The transitional phrase "consisting essentially of" limits the scope of a claim to the specified materials or steps "and those that do not materially affect the basic and novel characteristics" of the claimed invention. *In re Herz*, 537 F.2d 549 551-52, 190 USPQ 461, 463 (CCPA 1976)(emphasis in original omitted).

SEQ ID NOs: 5, 8, and 13 are polypeptide chains of 11, 18, and 15 amino acids respectively. The cited sequence of Wadsworth (SEQ ID NO: 45) discloses a polypeptide chain of 49 amino acids. As such, the cited sequence of Wadsworth is at least 2.7 times the length of (or 270% of) the claimed polypeptides. As is well known in the biotechnological arts, the addition of more than 170% additional amino acid sequence to a polypeptide can have drastic consequences in terms of overall function. As such, applicants respectfully submit that the additional 170% in sequence length disclosed by Wadsworth would materially affect the basic and novel characteristics of SEQ ID NOs: 5, 8, and 13. As amended claim 46 recites a composition "consisting essentially of" SEQ ID NOs: 5, 8, or 13, applicants respectfully submit that Wadsworth cannot anticipate amended claim 46.

Reconsideration and withdrawal of the rejection of claim 46 are respectfully requested.

Rejoinder of Claim 32

In the Office Action mailed April 5, 2005, at page 8, the Examiner indicated that where the applicant has elected claims directed to a product, and the product claim is subsequently found allowable, withdrawn process claims that depend from or otherwise include all the elements of the allowable product claim will be rejoined in accordance with the provisions of MPEP §821.04. Further, the Examiner indicated that such process claims will be entered as a matter of right. *Id.* Applicants respectfully submit that process claim 32, as amended, includes all the elements of claim 44, which applicants believe to be in condition for allowance. As such, applicants respectfully request that claim 32, as amended, be rejoined in the present application.

Consideration of claim 32 is respectfully requested.

CONCLUSION

In view of the foregoing amendments and remarks, the claims should define patentable subject matter and notice of allowance is requested. Amendments to the specification were made to correct typographical errors. No new matter was added. If any questions remain after consideration of the foregoing, the Office is invited to contact the applicants' undersigned attorney at the address or telephone number given herein.

Respectfully submitted,



Daniel J. Morath, Ph.D.
Registration No. 55,896
Attorney for Applicants
TRASKBRITT
P.O. Box 2550
Salt Lake City, Utah 84110-2550
Telephone: 801-532-1922

Date: December 12, 2005